

01-082

W. Scott Randolph
Director - Regulatory Affairs



July 20, 2001

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Bruce A. Franca
Acting Chief, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
7-C153
Washington, DC 20554

RE: Final Service Disruption Report for June 21, 2001 Event

Dear Mr. Franca,

In accordance with the outage reporting thresholds established in CC Docket 91-273, we are enclosing Verizon's Final Service Disruption Report for the outage affecting the Boston, MA area on June 21, 2001.

If you have any questions regarding this matter, please call me at (202) 515-2530.

- Sincerely,

W. Scott Randolph
Director - Regulatory Affairs

Enclosure

cc: R. Kimball
K. Nilsson

WIRE LINE OUTAGE REPORT

Reporting Carrier Verizon	Date of Incident 06/21/2001
Time of Incident 06:10 AM EDT	Geographic Area Affected Boston, MA
Services Affected IntraLATA Intraoffice <input type="checkbox"/> IntraLATA Interoffice <input checked="" type="checkbox"/> InterLATA Interoffice <input checked="" type="checkbox"/> E911 <input type="checkbox"/>	Number of Customers Affected 336,000 Number of Blocked Calls 136,000 Outage Duration 3 Hrs 35 Mins
Background of the Incident <p>An expansion project to double the capacity of an Alcatel digital cross-connect frame was in progress in the Boston Franklin Street (BSTNMAFRK32) Central Office. This job required the relocation of existing inter-bay communication cables and installation of new cable to accommodate the new port bays. Verizon Equipment Installers perform the work under the direction of the system vendor. At approximately 2:50 AM on June 21st, after the first group of cables was relocated, the Alcatel supervisor detected alarm conditions and notified Alcatel's Installation Technical Assistance Support (ITAS) group. He was told that some alarms were to be expected and to continue with the growth work. The Alcatel supervisor contacted ITAS on two more occasions, at 3:50 AM and 5:10 AM, to alert them of the ongoing alarm conditions. The on-site supervisor was advised to issue a "Restore Equipment" command to clear the alarms but both attempts to invoke this command failed. At 6:00 AM, ITAS and Alcatel's engineering support group instructed the supervisor to invoke an "Initialize System" command, which affects all processor circuit packs in the frame. This action caused 173 DS3s to fail at 6:10 AM.</p> <p>Verizon Tier II Support and a regional Alcatel representative were contacted for assistance. They assessed the damage and instructed the on-site personnel to restore all cables to their original positions. This backout procedure was initiated at 7:10 AM and completed at 7:20 AM. As the "Initialize System" command progressed, the individual systems began to restore. Full restoration was accomplished by 09:45 AM.</p> <p>Subsequent investigation determined that the cables were incorrectly connected. Any commands that were initiated to restore the equipment failed since the system was attempting to download wrong information because of the cabling error.</p>	
Direct Cause Procedural – System Vendor – Failure to follow standard procedures/documentation	
Root Cause Procedural – System Vendor – Insufficient supervision/control	
Name and Type of Equipment Alcatel 1631SX LMC 3/1 Cross-Connect Frame	Specific Part of the Network Involved Digital Cross-Connect System

Methods Used to Restore Service

The backout procedure was initiated to restore the frame to its original configuration and a system initialization invoked to restore the failed DS3s. After cables were restored to their original configuration, the system initialized successfully.

Steps Taken to Prevent Recurrence of the Incident

Verizon has requested Alcatel to produce a new 1631SX expansion detail procedure. Verizon will then schedule an on site meeting with Alcatel to review and validate the new procedure.

Verizon will schedule meetings with Alcatel to review their DCS work flow and escalation procedures. Verizon wants to ensure mutual understandings and emphasize their expectations that these procedures be followed in the future.

Evaluation of Best Practices

The following Best Practice recommended by the Network Reliability and Interoperability Council IV, Focus Group 3, Subcommittee 1 Final Report consolidating and revising the Best Practices applies to this outage: Procedural (PR) Best Practice, PR03, MOPs and Acceptance/Verification Check-Off Sheets for Hardware and Software Growth/Change Activities.

A detailed MOP using an Acceptance/Verification Check-Off Sheet may have detected the cabling error and prevented this outage.

Contact Person

William S. Randolph

Telephone Number of Contact Person

202-515-2530

01-082

**VERIZON
FCC NETWORK DISRUPTION
INITIAL REPORT**

TICKET #: AY1-LDR

1. **DATE AND TIME OF INCIDENT:** 06/21/2001 06:30:00 AM
2. **GEOGRAPHIC AREA AFFECTED:** Boston Ma. BSTNMAFR***
3. **MAXIMUM NUMBER OF CUSTOMERS AFFECTED:** 50,000
4. **TYPE OF SERVICES AFFECTED:**
☐ EMERGENCY-SERVICE ☒ INTERLATA ☐ OTHER
☒ INTRALATA ☐ 800 SERVICES
5. **DURATION OF OUTAGE:** ongoing
6. **ESTIMATED NUMBER OF BLOCKED CALLS:** Not Available
- 7A. **TYPE EQUIPMENT:** DCS K3/1 **VENDOR:** Alcatel
- 7B. **APPARENT OR KNOWN CAUSE OF INCIDENT:**
43 T's down, cause unknown
8. **METHOD USED TO RESTORE SERVICE:**
Not available at this time
9. **STEPS TAKEN TO PREVENT RECURRENCE:**
Not available at this time

Pursuant to Section 0.459 (b) of the Commission Rules, and for reason set forth below,
confidentiality is requested for items:
Reason for confidentiality:

☐ A Request to supplement the showing requested by section 0.459 (b) is hereby made and will be submitted expeditiously.

Request Supplement:

DATE AND TIME OF REPORT: 06/21/2001 08:12:51 AM

CONTACT AND TELEPHONE #: Michael Pearce 800-400-4662

NOTE: Retention period is 6 Years